



## Analyses of the effects of global change on human health and welfare and human systems. A report by the U.S. Climate Change Science Program and the Subcommittee on Global Change Research

---

<b>Author(s):</b>	Gamble JL, Ebi KL, Grambsch AE, Sussman FG, Wibanks TJ
<b>Year:</b>	2008
<b>Series:</b>	Final Report, Synthesis and Assessment Product 4.6
<b>Editor:</b>	Gamble, J. L.
<b>Publisher:</b>	U.S. Environmental Protection Agency (EPA) (Washington, DC)

---

### Abstract:

This report -- Synthesis and Assessment Product 4.6 (SAP 4.6) -- focuses on impacts of global climate change, especially impacts on three broad dimensions of the human condition: human health, human settlements, and human welfare. SAP 4.6 has been prepared by a team of experts from academia, government, and the private sector in response to the mandate of the U.S. Climate Change Science Program's Strategic Plan (2003). The assessment examines potential impacts of climate change on human society, opportunities for adaptation, and associated recommendations for addressing data gaps and near- and long-term research goals.

**Source:** <http://downloads.globalchange.gov/sap/sap4-6/sap4-6-final-report-all.pdf>

### Resource Description

#### Early Warning System:

resource focus on systems used to warn populations of high temperatures, extreme weather, or other elements of climate change to prevent harm to health

A focus of content

#### Exposure :

weather or climate related pathway by which climate change affects health

Air Pollution, Ecosystem Changes, Extreme Weather Event, Food/Water Quality, Food/Water Quality, Food/Water Security, Food/Water Security, Glacier/Snow Melt, Indoor Environment, Precipitation, Sea Level Rise, Temperature

**Air Pollution:** Allergens, Ozone, Particulate Matter

**Extreme Weather Event:** Drought, Flooding, Hurricanes/Cyclones, Landslides, Wildfires

**Food/Water Quality:** Biotoxin/Algal Bloom, Pathogen

**Food/Water Security:** Agricultural Productivity

# Climate Change and Human Health Literature Portal

**Temperature:** Extreme Cold, Extreme Heat, Fluctuations

**Geographic Feature:** 

resource focuses on specific type of geography

Desert, Freshwater, Ocean/Coastal, Urban, Other Geographical Feature

**Other Geographical Feature :** Forests

**Geographic Location:** 

resource focuses on specific location

United States

**Health Co-Benefit/Co-Harm (Adaption/Mitigation):** 

specification of beneficial or harmful impacts to health resulting from efforts to reduce or cope with greenhouse gases

A focus of content

**Health Impact:** 

specification of health effect or disease related to climate change exposure

Cardiovascular Effect, Infectious Disease, Injury, Morbidity/Mortality, Respiratory Effect, Other Health Impact

**Infectious Disease:** Airborne Disease, Foodborne/Waterborne Disease, Vectorborne Disease, Zoonotic Disease

**Airborne Disease:** Coccidioidomycosis (Valley Fever), Influenza

**Foodborne/Waterborne Disease:** Campylobacteriosis, Cryptosporidiosis, E. coli, Giardiasis, Leptospirosis, Norovirus, Rotavirus, Salmonellosis, Vibrios, Other Diarrheal Disease

**Foodborne/Waterborne Disease (other):** Naegleria fowleri

**Vectorborne Disease:** Flea-borne Disease, Mosquito-borne Disease, Tick-borne Disease

**Flea-borne Disease:** Plague

**Mosquito-borne Disease:** Dengue, Viral Encephalitis, West Nile Virus

**Tick-borne Disease:** Ehrlichiosis, Lyme Disease

**Zoonotic Disease:** Hantavirus Pulmonary Syndrome

**Respiratory Effect:** Asthma, Chronic Obstructive Pulmonary Disease, Upper Respiratory Allergy, Other Respiratory Effect

**Respiratory Condition (other) :** Allergic rhinitis

**Other Health Impact:** Heat stress; Heat stroke; Hospitalizations

**Mitigation/Adaptation:** 

mitigation or adaptation strategy is a focus of resource

# Climate Change and Human Health Literature Portal

Adaptation

## **Model/Methodology:**

type of model used or methodology development is a focus of resource

Exposure Change Prediction, Outcome Change Prediction

**Population of Concern:** A focus of content

## **Population of Concern:**

populations at particular risk or vulnerability to climate change impacts

Children, Elderly, Low Socioeconomic Status, Pregnant Women, Racial/Ethnic Subgroup, Workers

**Other Racial/Ethnic Subgroup:** Minority populations

**Other Vulnerable Population:** Immunocompromised; Uninsured; Pre-existing medical conditions

## **Resource Type:**

format or standard characteristic of resource

Review

## **Resilience:**

capacity of an individual, community, or institution to dynamically and effectively respond or adapt to shifting climate impact circumstances while continuing to function

A focus of content

**Socioeconomic Scenario:** Other Socioeconomic Scenario

**Other Socioeconomic Scenario:** US Census Projections

## **Timescale:**

time period studied

Long-Term (>50 years)

## **Vulnerability/Impact Assessment:**

resource focus on process of identifying, quantifying, and prioritizing vulnerabilities in a system

A focus of content